

Section 5199.1 Operations involving animals infected with zoonotic aerosol transmissible pathogens

(a) Scope, Application and Definitions

(1) Scope.

(A) This section applies to occupational exposure in each of the following work settings:

1. Operations involving the management, capture, sampling or disposal of wild birds or other wildlife.
2. Farms producing animals or animal products.
3. Slaughterhouses and initial processing facilities for untreated animal products, byproducts, or wastes.
4. Veterinary, animal inspection, and other animal health operations.
5. Importers of live animals and untreated animal products.
6. Zoos, animal parks, pet stores and other operations in which animals are displayed or housed.
7. Laboratory operations involving samples, cultures, or other materials potentially containing zoonotic aerosol transmissible pathogens (zoonotic ATPs).

(B) This section does not apply to restaurants or facilities or portions of facilities in which the sole exposure to animal products, byproducts, or wastes comes from carcasses or portions thereof that have passed an inspection conducted in accordance with applicable regulations of the USDA or CDFA.

(2) Application.

(A) Every employer who has employees with occupational exposure to animals or untreated animal products, byproducts, or wastes that may be a source of exposure to zoonotic aerosol transmissible pathogens (ATP), shall establish, implement, and maintain effective procedures for control of zoonotic diseases in accordance with Section 3203. These procedures shall include applicable sanitation and biosecurity measures, the use of personal protective equipment, and medical surveillance measures recommended by the CDC, CDHS, or Local Health Officer. Training shall be appropriate in content and vocabulary to the educational level, literacy, and language of employees. This subsection is not intended to exclude the application of Section 3203 to other zoonotic disease hazards.

(B) In addition to complying with subsection (a)(2)(A), employers shall also comply with subsections (b) and (e) if they have work operations that involve:

1. Capturing or sampling of animals for the purpose of determining whether they are infected with zoonotic ATPs, or

2. Collecting and disposing of animals for which an alert regarding the potential of zoonotic infection has been issued by the CDC, CDFA, CDFG, CDHS, USDA, or USDOJ.

(C) In addition to complying with subsection (a)(2)(A), employers shall also comply with subsections (c) and (e) if they have establishments or operations for which the USDA or CDFA have issued a quarantine order, movement restriction, or other infection control order due to an increased risk of zoonotic ATP infection.

(D) In addition to complying with subsection (a)(2)(A), employers shall also comply with subsections (d) and (e) if they have work operations that involve:

1. handling, culling, transporting, killing, eradicating, or disposing of animals infected with zoonotic ATPs, or
2. cleaning or disinfecting areas used to contain such animals.

(E) Laboratory operations. Laboratory operations involving samples, cultures, or other materials potentially containing zoonotic ATPs shall comply with Section 5199(e).

Note to subsection (a)(2): Hazardous Waste and Emergency Response Operations shall also comply with Section 5192.

(3) Definitions.

Aerosol means a suspension of liquid or solid particles in the air, including droplets, droplet nuclei, fomites, and dusts.

Animals infected with zoonotic ATPs means animals that 1. have been diagnosed with a zoonotic ATP through recognized testing methods, or 2. meet the clinical definition of a suspect case of infection with a zoonotic ATP, or 3. have been identified by the CDFA, CDFG, USDA, or USDOJ as requiring isolation, quarantine, or destruction due to suspected or confirmed infection.

Animal waste means animal carcasses, excrement, contaminated litter, or debris from the bodies of animals, such as feathers or dander.

Biosecurity procedures means control measures, such as traffic control, disinfection, and isolation, that are implemented to reduce the risk of transmission of infection into, from, or within an establishment.

CDFA means the California Department of Food and Agriculture

CDFG means the California Department of Fish and Game

CDC means the United States Centers for Disease Control and Prevention.

CDHS means the California Department of Health Services.

Chief means the Chief of the Division of Occupational Safety and Health of the Department of Industrial Relations.

Immediately Dangerous to Life or Health (IDLH) means an atmosphere that poses an immediate threat to life, would cause irreversible adverse health effects, or would impair an individual's ability to escape.

Local Health Officer means the health officer for the local jurisdiction responsible for receiving and/or sending reports of communicable diseases, as defined in Title 17 of the California Code of Regulations.

NIOSH means the director of the National Institute for Occupational Safety and Health, CDC, or designated representative.

Occupational exposure means reasonably anticipated work exposure to a source of zoonotic ATPs under conditions that, without the use of protective measures, create a significant risk of contracting the disease caused by the pathogen. Examples of such conditions include: conducting diagnostic sampling of animals reasonably suspected of infection, performing animal husbandry activities with flocks quarantined due to an increased risk of infection with zoonotic ATPs, and disposing of infected animal carcasses or their wastes.

Oxygen deficient atmosphere means an atmosphere with an oxygen content below 19.5% by volume.

Physician or other Licensed Health Care Professional (PLHCP) means an individual whose legally permitted scope of practice in California allows him or her to independently provide or be delegated the responsibility to provide some or all of the health care services required by this section.

Untreated animal products, byproducts, or wastes means materials derived from animals that have not been processed in a manner that will deactivate zoonotic ATPs they may contain. "Untreated animal products, byproducts, or wastes" do not include animal carcasses or portions thereof that have passed an inspection in accordance with the regulations of the USDA or CDFA.

USDA means the United States Department of Agriculture

USDOI means the United States Department of the Interior, or any of its agencies, including the United States Fish and Wildlife Service (USFWS) and the United States Geological Survey (USGS).

Zoonotic Aerosol Transmissible Pathogen (Zoonotic ATP) means a disease agent that is transmissible from animals to humans by aerosol, and is capable of causing human disease. Zoonotic ATPs include pathogens that are classified as transmissible either by droplets or by an airborne route.

(b) Exposure to potentially infectious wildlife.

- (1) The employer shall establish, implement, and maintain effective written procedures for operations that involve capturing or sampling of animals for the presence of infection with zoonotic ATPs, or the collecting and disposing of animals for which an alert regarding the potential of zoonotic infection has been issued by the CDC, CDFA, CDFG, CDHS, USDA or USDOJ. These procedures shall be kept available at the site of all work operations covered by this subsection.
- (2) These procedures shall include, to the extent applicable,
 - (A) work procedures that minimize the production of aerosols,
 - (B) use of personal protective equipment,
 - (C) cleaning and decontamination procedures,
 - (D) medical surveillance as recommended by the CDC, CDHS or Local Health Officer, and
 - (E) training.
- (3) These procedures shall include the use of respiratory protection in accordance with Section 5144 when:
 1. there is an increased potential of exposure to infectious aerosols, such as when handling animals in an enclosed or indoor area,
 2. responding to a mortality event involving a significant number of animals ~~in an affected species~~, or
 3. there are animal-related dusts in the environment that are reasonably likely to be an aerosol infection hazard to employees.

(c) When the USDA or the CDFA issues a quarantine order, movement restriction, or other infection control order applicable to an establishment due to an increased risk of zoonotic ATP infection, the employer shall establish, implement and maintain effective written zoonotic disease control procedures to protect employees from hazards related to undetected or early infection in animals. These procedures shall be available on site at all times when employees are present, and shall include the following elements:

- (1) The employer shall identify restricted areas in which occupational exposure to potentially infectious animals may occur and shall post signs at entrances to those areas identifying them as restricted areas. These signs shall be in all languages necessary to ensure that they are understood by all affected employees.
- (2) The employer shall ensure that all employees who enter into restricted areas are protected as follows:

- (A) All employees who enter into the restricted area shall be supervised by a person who is knowledgeable in the employer's zoonotic disease control procedures.
 - (B) All employees shall be provided with, and the employer shall ensure that employees use, protective clothing and equipment, such as coveralls or similar whole-body clothing, head coverings, gloves, and foot coverings. The employer shall provide for the disposal or laundering of this clothing and equipment, at no cost to the employees, in a manner that will not further expose employees to potentially infectious materials. Laundry shall be handled in accordance with 5193(d)(3)(J). Where the disease may be transmitted by contact with the eyes or mucous membranes, appropriate eye, mouth and nose protection shall be used. The use of personal protective equipment shall comply with Article 10.
 - (C) Respiratory protection. The employer shall provide, and ensure that employees use, approved respiratory protection when entering into enclosed areas in which aerosols from potentially infectious animals or animal wastes are present. Respirator use shall be in accordance with Section 5144.
 - (D) Sanitary facilities, drinking water, and a method to access them shall be provided. Change rooms and shower rooms shall be provided in accordance with Article 9.
Exception: Where change rooms and shower rooms are not feasible, the employer shall implement alternative measures for sanitation and changing clothes.
 - (E) The employer shall provide all medical surveillance, vaccinations, or prophylaxis recommended by the CDC, CDHS or Local Health Officer for exposed employees.
 - (F) The employer shall provide training that is appropriate in content and vocabulary to the educational level, literacy, and language of employees. This training shall include the nature of the zoonotic disease hazard, the employer's control measures, the use of personal protective equipment and respiratory protective equipment, decontamination procedures, recommended vaccinations or prophylaxis, and heat illness prevention.
 - (G) The employer shall establish procedures for recording the entry of persons into the restricted area. These records shall be maintained and made available in accordance with subsection (e).
- (3) The additional protective measures required by this subsection are no longer required if testing acceptable to the agency placing the movement restriction, quarantine or other infection control order determines that the premises is free from infection, and is no longer at increased risk, although the movement restriction may remain in place.
- (d) Every employer with work operations involving handling, culling, transporting, killing, eradicating, or disposing of animals infected with zoonotic ATPs, or the cleaning and disinfection of areas used to contain such animals, shall establish, implement, and maintain written zoonotic disease control procedures to control the risk of transmission of disease from the animals to employees. These procedures shall

be available on-site at all times when employees are present, and shall be maintained as an employee exposure record, in accordance with Section 3204.

- (1) The written procedures shall include all of the following as they apply to the employer's operation:
 - (A) A detailed work plan including an assessment of the risks to employees, including biological, chemical, physical, and safety hazards, and a description of site control measures including designating a restricted area consisting of contaminated zones and contaminant reduction zones. A support zone shall be located outside of the restricted area.
 - (B) A list of all jobs, tasks or procedures in which employees have occupational exposure.
 - (C) The measures the employer will use to control employee exposure, including each of the following:
 1. Engineering, work practice controls, and exposure monitoring.
 2. Procedures for the application of toxic or asphyxiant gases.
 3. Respiratory protection.
 4. Personal protective equipment and protective clothing.
 5. Decontamination procedures.
 6. Disposal of animal waste and contaminated personal protective equipment.
 7. Medical surveillance.
 8. Training.
 9. Record keeping.
 - (D) Procedures to provide employees ready or frequent access to drinking water and sanitation facilities, including appropriate decontamination methods.
 - (E) Procedures to protect employees from the risk of heat illness.
- (2) Operations in the restricted area shall be supervised at all times by a person knowledgeable in and authorized to enforce the employer's zoonotic disease control procedures. The supervisor shall ensure that all persons entering the restricted area have been trained in the control procedures applicable to the site or operation and are protected in accordance with this section.
- (3) The employer shall provide and ensure that employees use personal protective equipment and clothing that meets the requirements of Article 10 and is adequate to ensure that hazardous substances and contaminated fluids and aerosols do not penetrate to the employee's mucous membranes or skin. The equipment and clothing shall be reasonably comfortable and shall not unduly encumber the employee's movements necessary to perform the work. The equipment and clothing shall be selected to be compatible with decontamination and disposal methods available at the site.
- (4) Respiratory Protection. The employer shall provide and ensure that employees use appropriate respiratory protection during operations in the restricted area in accordance with section 5144, unless the employer demonstrates that engineering and work practice controls have eliminated the risk to employees. Respirator selection shall be based on the infectious disease hazard and on any hazardous substances that may require respiratory protection. Respirators shall be used until

- work areas have been decontaminated. Employees who work in enclosed areas shall use, at a minimum, elastomeric facepiece respirators or powered air purifying respirators (PAPR) with appropriate cartridges, unless the employer can demonstrate that such use is not necessary to protect employees. The employer shall provide and ensure that employees use appropriate eye protection, unless employees use full facepiece respirators or PAPRs that provide eye protection.
- (5) Additional procedures for the application of toxic or asphyxiant gases. Employers whose work operations include areas in which toxic or asphyxiant gases are applied shall develop and implement written procedures that ensure all of the following:
- (A) Prior to the application of toxic or asphyxiant gases to occupiable areas, the employer shall take positive measures to assure that no persons are in areas to which gas is applied. The completion of the measures shall be documented in writing and signed by the supervisor of the restricted area, prior to the application of gases. These measures shall include, but not be limited to, each of the following:
 - 1. A physical or visual search of the area.
 - 2. An audible or visual warning that is recognizable by all persons in the area.
 - 3. An accounting for all personnel who are known to be in the restricted zone.
 - (B) Signs shall be posted prior to the application of gases at all possible entry points to the area. The signs shall be visible from a distance of 12 feet and clearly display the words "Danger – Do Not Enter," the poison symbol shown in Appendix A, and the name of the gas being applied. The signs shall be in all languages necessary to be understood by employees. Employees shall be prohibited from entering the area once the signs have been posted unless the employees enter under procedures for IDLH atmospheres as required by Section 5144(g).
 - (C) The area shall be effectively ventilated prior to the re-entry of employees. Ventilation shall be accomplished in a manner that does not endanger employees working in other areas of the site.
 - (D) The signs required by subsection (d)(5)(A) shall not be removed until the employer has tested the atmosphere in the area and determined that it is not oxygen deficient, does not contain an atmosphere immediately dangerous to life or health (IDLH), and does not exceed the ceiling or short term exposure limits in Section 5155 for the applied gases. The employer shall ensure that the testing represents all potential exposures in the area. The results of this testing shall be recorded, including the specific area in which the measurements were taken, the date and time of the measurements, and the name and title of the person taking the measurements. This record shall be posted at the entrance to the area for the duration of the work operation, and then shall be retained in accordance with subsection (e).
 - (E) Continuous monitoring for oxygen deficiency and toxic gases shall be conducted in any areas in which employees are working adjacent to the

area of application and where a hazardous atmosphere may exist. Employees shall be directed to exit the area immediately if an oxygen deficient atmosphere is detected or if toxic substances are detected at levels which exceed the permissible exposure limits in Section 5155, independent of the duration of exposure. The area shall be posted as described in subsection (d)(5)(A), and entry shall be prohibited except under IDLH procedures, until the employer has verified that the area is safe for re-entry in accordance with subsection (d)(5)(C).

(F) Where employees enter confined spaces, a permit-required confined space program meeting the requirements of Section 5157 shall be utilized.

(G) Fumigation operations shall also comply with Article 111.

(6) Disposal. Procedures for treatment and disposal of animal waste and contaminated personal protective equipment and clothing shall minimize employee exposures to zoonotic disease hazards, and shall be in accordance with applicable regulations of Cal/EPA.

(7) Decontamination. The employer shall ensure that employees are properly decontaminated when leaving the restricted area and that contaminated clothing and equipment are appropriately decontaminated or disposed of. Decontamination facilities shall include change rooms and shower facilities in accordance with Article 9.

Exception: Where change rooms and shower facilities are not feasible, the employer shall implement alternative measures for decontamination and changing clothes.

(8) Medical Surveillance. The employer shall provide a medical surveillance program to all employees who enter into the restricted area. The employer shall consult a PLHCP knowledgeable about chemical and zoonotic disease hazards in developing the program. The program shall maintain medical confidentiality in accordance with Section 3204. The employer shall provide, at no cost to the employee and during work hours, all vaccinations, prophylaxis, and medical surveillance recommended by the PLHCP, the CDC, the CDHS or the Local Health Officer for employees involved in these operations. The medical surveillance program shall include, at a minimum:

(A) Initial medical evaluation to be provided prior to first entrance into a restricted area. This shall include a respirator medical evaluation, in accordance with Section 5144(e).

(B) Surveillance as recommended by the PLHCP for signs and symptoms of zoonotic disease. Employees exhibiting signs or symptoms of zoonotic disease and employees requesting referral shall be referred immediately to the PLHCP for follow-up evaluation.

(C) Surveillance as recommended by the PLHCP for signs and symptoms of over-exposures to hazardous substances as appropriate for substances present in the work operation. Employees exhibiting these signs or symptoms shall be referred immediately to the PLHCP for follow-up evaluation, and the employer shall further investigate the source of the over-exposure and take corrective measures, as needed.

- (D) Provision of vaccinations or prophylaxis as recommended by the CDC, the CDHS, the Local Health Officer, or the PLHCP.
- (E) Follow-up medical evaluations as recommended by the CDC, the CDHS, the Local Health Officer or the PLHCP.
- (F) The PLHCP shall limit information provided to the employer to the following:
 - 1. For respirator medical evaluations, information shall be limited to the information required in Section 5144(e)(6)(A).
 - 2. For provision of vaccination or prophylaxis, the PLHCP shall inform the employer as to whether the employee is authorized to enter the restricted area based on immunization or prophylaxis protocols.
 - 3. For referrals and follow-up medical evaluations, the PLHCP shall inform the employer that the employee has received the evaluation, whether additional evaluation is required, and whether the employee is authorized to work in the restricted area.
- (9) Training. Employees shall receive training upon initial assignment, and whenever site conditions are substantially changed. Training shall be appropriate in content and vocabulary to the educational level, literacy, and language of employees. The training shall include each of the following as they apply to the work operation:
 - (A) The identification and description of the zoonotic diseases that may be present in the work operation, and their signs and symptoms.
 - (B) The processes and procedures employees will use in restricted areas or when dealing with infected animals or their waste.
 - (C) The employer's safety program, including engineering and administrative controls, exposure monitoring and the results of exposure monitoring, the use of personal and respiratory protection equipment, cleaning and decontamination procedures, access to sanitation facilities and drinking water, and methods to control the risk of heat illness.
 - (D) The meaning of signs that will be used on site.
 - (E) Hazard communications training in accordance with section 5194.
 - (F) The employer's medical surveillance program.
- (e) Recordkeeping. The employer shall establish and maintain records of implementation of the employer's zoonotic disease control procedures as follows:
 - (1) Records of implementation of hazard identification, evaluation and control, and employee training required by this section shall be created and maintained in accordance with Section 3203.
 - (2) Employee exposure records, including the employer's zoonotic disease control procedures as required by subsections (b), (c), and (d), records of entry into restricted areas, records of atmospheric testing, and records of exposures to hazardous substances shall be maintained in accordance with Section 3204.
 - (3) Records of medical surveillance shall be maintained and made available in accordance with Section 3204.
 - (4) Records of the Respiratory Protection Program shall be established, maintained, and made available in accordance with Section 5144 and Section 3204.
 - (5) Availability.
 - (A) The employer shall ensure that all records required to be maintained by this section are made available upon request to the Chief, his designated

representatives, NIOSH, and the Local Health Officer for examination and copying.

(B) Employee training records required by this subsection shall be provided upon request for examination and copying to employees, to employee representatives, to the Chief, his designated representatives, and to NIOSH.

(C) Employee exposure records required by this section shall be provided upon request for examination and copying to employees, to employee representatives, to the Chief, his designated representatives, and to NIOSH.

Employee medical records required by this section shall be provided upon request for examination and copying to the subject employee, to anyone having written consent of the subject employee, and, in accordance with the provisions of Section 3204, to the Chief, his designated representative, to NIOSH, and to the Local Health Officer.